

Examiner's Amendment

1. An examiner's amendment to the record is attached. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. David A. Grabelsky (Reg. 59,208) on August 11, 2009.

3. In the claims:

- Please amend the claims as attached.

17. (Currently amended) In a network device, a method comprising:
storing in physical memory of the network device first data representing a first logical grouping of a first plurality of media gateways into a first virtual media gateway, each media gateway of the first plurality being communicatively coupled with the network device via a communication network, and the first data including, for each media gateway of the first plurality, a network address and media gateway attribute;
associating a first identifier with the first logical grouping, the first identifier being a virtual network address; and
intermediating communications between a media gateway controller and the first plurality of media gateways based on at least the first identifier, the media gateway controller being

communicatively coupled with the network device via the communication network, wherein intermediating communications ~~comprises sending and receiving messages via the communication network between the media gateway controller and the first plurality of media gateways based on at least the first identifier comprises receiving a media gateway control message from the media gateway controller, the media gateway control message including the virtual network address associated with the first virtual media gateway, a sub-command, and an attribute.~~

18. (Currently amended) The method of claim 17, further comprising:

storing in the physical memory of the network device second data representing a second logical grouping of a second plurality of media gateways into a second virtual media gateway, each media gateway of the second plurality being communicatively coupled with the network device via the communication network, and the second data including, for each media gateway of the second plurality, a network address and a media gateway attribute;

associating a second identifier with the second logical grouping; and

intermediating communications between the media gateway controller and the second plurality of media gateways based on at least the second identifier.

19. (Canceled) ~~The method of claim 17, wherein the first identifier is a virtual network address, and wherein associating the first identifier with the first logical grouping comprises associating the virtual network address with the first virtual media gateway.~~

20. (Currently amended) The method of claim 17, wherein intermediating communications between the media gateway controller and the first plurality of media gateways further comprises intermediating media gateway control messages between the media gateway controller and the first plurality of media gateways.

21. (Previously presented) The method of claim 20, wherein the media gateway control messages comprise messages compliant with a protocol for media gateway control.

22. (Previously presented) The method of claim 21, wherein the protocol is at least one of MEGACO and MGCP.

23. (Currently amended) The method of claim 49 17, wherein intermediating communications between the media gateway controller and the first plurality of media gateways based on at least the first identifier further comprises:

~~at the network device, receiving a media gateway control message from the media gateway controller, the media gateway control message including the virtual network address associated with the first virtual media gateway, a sub-command, and an attribute;~~

determining a network address for a particular media gateway of the first plurality by matching the attribute to a media gateway attribute in the first data; and

sending the sub-command to the particular media gateway according to the network address for the particular media gateway.

24. (Currently amended) The method of claim 49 17, wherein intermediating communications between the media gateway controller and the first plurality of media gateways based on at least the first identifier further comprises:

at the network device, receiving a media gateway control response message from at least one media gateway of the first plurality, the media gateway control response message being a reply to a media gateway control message sent from the media gateway controller to the at least one media gateway via the device;

forming a media gateway control transaction reply message that includes the media gateway control response message from the at least one media gateway of the first plurality, and also includes the virtual network address; and

sending the media gateway control transaction reply message to the media gateway controller.

25. (Currently amended) The method of claim 49 17, wherein intermediating communications between the media gateway controller and the first plurality of media gateways based on at least the first identifier further comprises:

at the network device, receiving a media gateway control message from the media gateway controller, the media gateway control message including the virtual network address associated with the first virtual media gateway, and also including a plurality of sub-commands, each sub-command being paired with an attribute;

for each respective sub-command of the plurality of sub-commands:

determining a network address for a given media gateway of the first plurality by matching

the attribute paired with the respective sub-command to a media gateway attribute in the first data,

sending the respective sub-command to the given media gateway according to the network address for the given media gateway,

and receiving at the network device a sub-command response to the respective sub-command from the given media gateway;

forming a media gateway control transaction reply message that includes each sub-command response, and also includes the virtual network address; and

sending the media gateway control transaction reply message to the media gateway controller.

26. (Currently amended) A network device comprising:

means for storing in physical memory of the network device first data representing a first logical grouping of a first plurality of media gateways into a first virtual media gateway, wherein each media gateway of the first plurality is communicatively coupled with the network device via a communication network, and wherein the first data includes, for each media gateway of the first plurality, a network address and media gateway attribute;

means for associating a first identifier with the first logical grouping, the first identifier being a virtual network address; and

means for intermediating communications between a media gateway controller and the first plurality of media gateways based on at least the first identifier, wherein the media gateway controller is communicatively coupled with the network device via the communication network,

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wherein intermediating communications ~~comprises sending and receiving messages via the communication network between the media gateway controller and the first plurality of media gateways based on at least the first identifier~~ comprises receiving a media gateway control message from the media gateway controller, the media gateway control message including the virtual network address associated with the first virtual media gateway, a sub-command, and an attribute.

27. (Previously presented) The network device of claim 26 further comprising:

means for storing in the physical memory of the network device second data representing a second logical grouping of a second plurality of media gateways into a second virtual media gateway, wherein each media gateway of the second plurality is communicatively coupled with the network device via the communication network, and wherein the second data includes, for each media gateway of the second plurality, a network address and a media gateway attribute;

means associating a second identifier with the second logical grouping; and

means intermediating communications between the media gateway controller and the second plurality of media gateways based on at least the second identifier.

28. (Canceled) ~~The network device of claim 26, wherein the first identifier is a virtual network address, and wherein means for associating the first identifier with the first logical grouping comprise means for associating the virtual network address with the first virtual media gateway.~~

29. (Currently amended) The network device of claim 26, wherein means for

intermediating communications between the media gateway controller and the first plurality of media gateways further comprise means for intermediating media gateway control messages between the media gateway controller and the first plurality of media gateways.

30. (Previously presented) The network device of claim 29, wherein the media gateway control messages comprise messages compliant with a protocol for media gateway control.

31. (Currently amended) The network device of claim ~~28~~ 26, wherein means for intermediating communications between the media gateway controller and the first plurality of media gateways based on at least the first identifier further comprise:

~~means for receiving at the network device a media gateway control message from the media gateway controller, wherein the media gateway control message includes the virtual network address associated with the first virtual media gateway, a sub-command, and an attribute;~~

means for determining a network address for a particular media gateway of the first plurality by matching the attribute to a media gateway attribute in the first data; and

means for sending the sub-command to the particular media gateway according to the network address for the particular media gateway.

32. (Currently amended) The network device of claim ~~28~~ 26, wherein means for intermediating communications between the media gateway controller and the first plurality of

media gateways based on at least the first identifier further comprise:

means for receiving at the network device a media gateway control response message from at least one media gateway of the first plurality, wherein the media gateway control response message is a reply to a media gateway control message sent from the media gateway controller to the at least one media gateway via the device;

means for forming a media gateway control transaction reply message that includes the media gateway control response message from the at least one media gateway of the first plurality, and also includes the virtual network address; and

means for sending the media gateway control transaction reply message to the media gateway controller.

33. (Currently amended) The network device of claim ~~28~~ 26, wherein means for intermediating communications between the media gateway controller and the first plurality of media gateways based on at least the first identifier further comprise:

means for receiving at the network device a media gateway control message from the media gateway controller, wherein the media gateway control message includes the virtual network address associated with the first virtual media gateway, and also includes a plurality of sub-commands, wherein each sub-command is paired with an attribute;

means for, for each respective sub-command of the plurality of sub-commands:

determining a network address for a given media gateway of the first plurality by matching the attribute paired with the respective sub-command to a media gateway attribute in the first data,

sending the respective sub-command to the given media gateway according to the network address for the given media gateway,

and receiving at the network device a sub-command response to the respective sub-command from the given media gateway;

means for forming a media gateway control transaction reply message that includes each sub-command response, and also includes the virtual network address; and

means for sending the media gateway control transaction reply message to the media gateway controller.

34. (Currently amended) A ~~tangible computer-readable~~ computer-usable storage medium having stored thereon, computer-executable instructions that, if executed by a computing device, cause the computing device to perform a method comprising:

storing first data representing a first logical grouping of a first plurality of media gateways, wherein the first logical grouping comprises a first virtual media gateway, and wherein the first data includes, for each media gateway of the first plurality, a network address and media gateway attribute;

associating a first identifier with the first logical grouping, wherein the first identifier is a virtual network address; and

- intermediating communications between a media gateway controller and the first plurality of media gateways based on at least the first identifier, wherein intermediating communications ~~comprises sending and receiving messages via the communication network~~ between the media gateway controller and the first plurality of media gateways

based on at least the first identifier comprises receiving a media gateway control message from the media gateway controller, the media gateway control message including the virtual network address associated with the first virtual media gateway, a sub-command, and an attribute.

35. (Currently amended) The ~~tangible computer-readable~~ computer-usable storage medium of claim 34, ~~wherein the first identifier is a virtual network address,~~
wherein associating the first identifier with the first logical grouping comprises associating the virtual network address with the first virtual media gateway,
wherein intermediating communications between the media gateway controller and the first plurality of media gateways further comprises intermediating media gateway control messages between the media gateway controller and the first plurality of media gateways,
and wherein the media gateway control messages comprise messages compliant with a protocol for media gateway control.

36. (Currently amended) The ~~tangible computer-readable~~ computer-usable storage medium of claim 34, ~~wherein the first identifier is a virtual network address,~~
wherein associating the first identifier with the first logical grouping comprises associating the virtual network address with the first virtual media gateway,
and wherein intermediating communications between the media gateway controller and the first plurality of media gateways based on at least the first identifier further comprises:
~~receiving a media gateway control message from the media gateway controller, wherein~~

~~the media gateway control message includes the virtual network address associated with the first virtual media gateway, and also includes a plurality of sub-commands, wherein each sub-command is paired with an attribute;~~

for each respective sub-command of the plurality of sub-commands:

determining a network address for a given media gateway of the first plurality by matching the attribute paired with the respective sub-command to a media gateway attribute in the first data,

sending the respective sub-command to the given media gateway according to the network address for the given media gateway,

and receiving a sub-command response to the respective sub-command from the given media gateway;

forming a media gateway control transaction reply message that includes each sub-command response, and also includes the virtual network address; and

sending the media gateway control transaction reply message to the media gateway controller.

Allowable Subject Matter

The above indicated claims are allowed.

The following is an examiner's statement of reasons for allowance:

None of the prior art taken singularly or in combination reasonably teaches or suggests the combined functional limitations directed a device storing in physical memory of the network device first data representing a first logical grouping of a first plurality of media gateways

into a first virtual media gateway, each media gateway of the first plurality being communicatively coupled with the network device via a communication network, and the first data including, for each media gateway of the first plurality, a network address and media gateway attribute; associating a first identifier with the first logical grouping, the first identifier being a virtual network address; and where the act of intermediating communications based on at least the first identifier comprises receiving a media gateway control message from the media gateway controller, the media gateway control message including the virtual network address associated with the first virtual media gateway, a sub-command, and an attribute.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Barqadle whose telephone number is 571-272-3947. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yasin M Barqadle/
Primary Examiner, Art Unit 2456